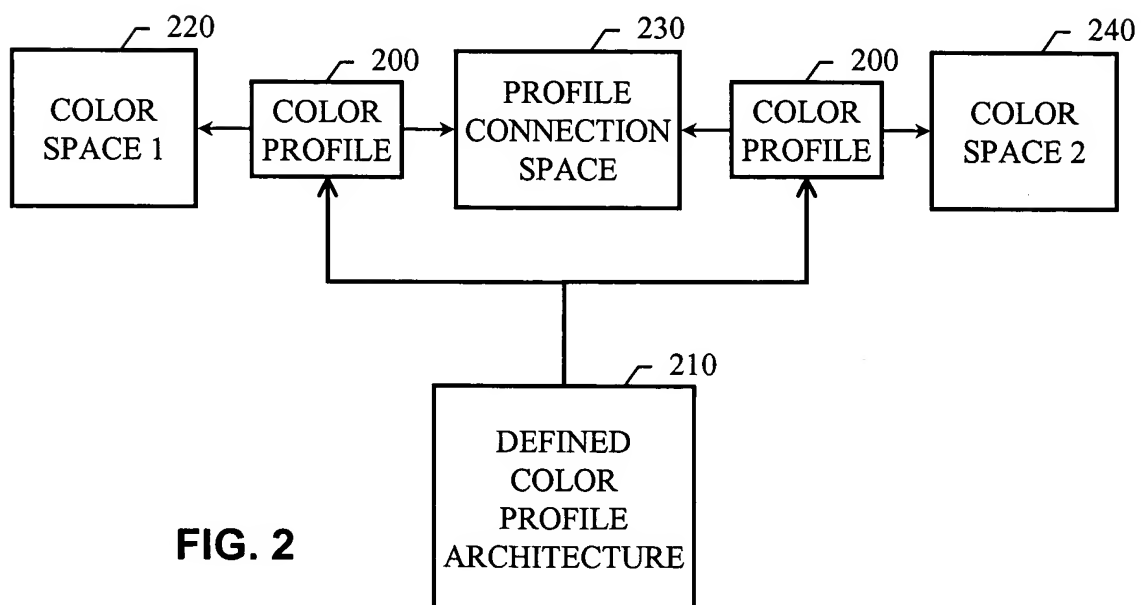


**FIG. 1**



**FIG. 2**

CONSTRUCTING COLOR PROFILE FOR PARAMETERIZED  
IMAGE COLOR SPACE

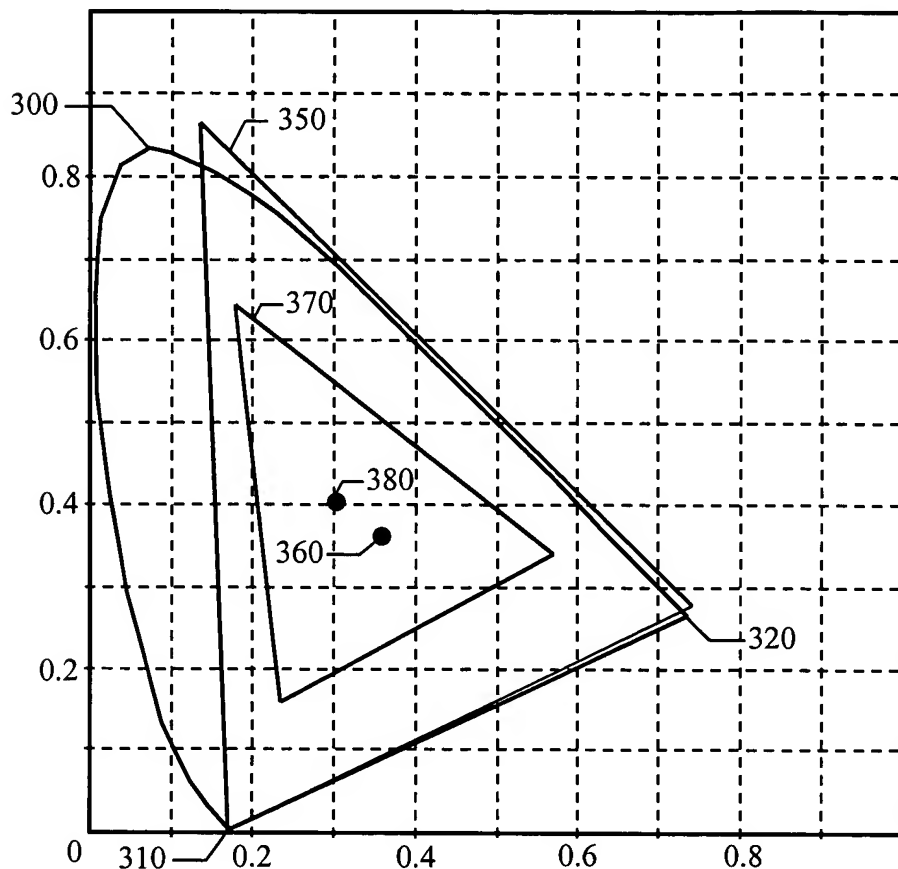


FIG. 3

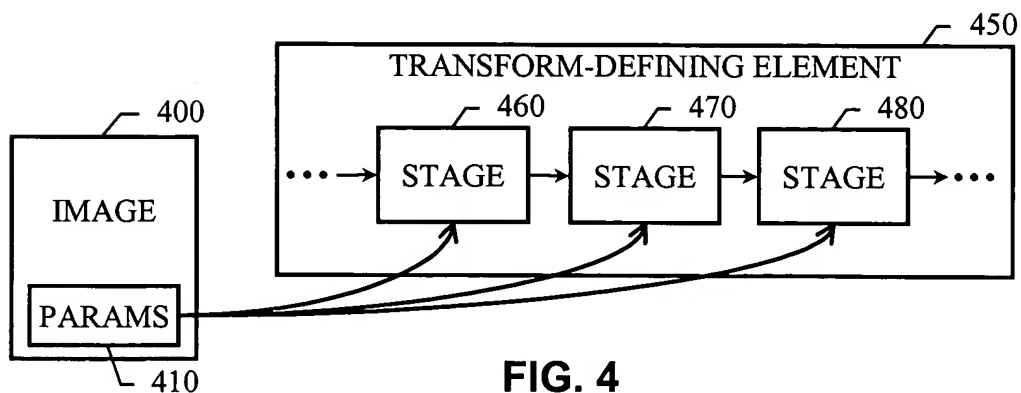


FIG. 4

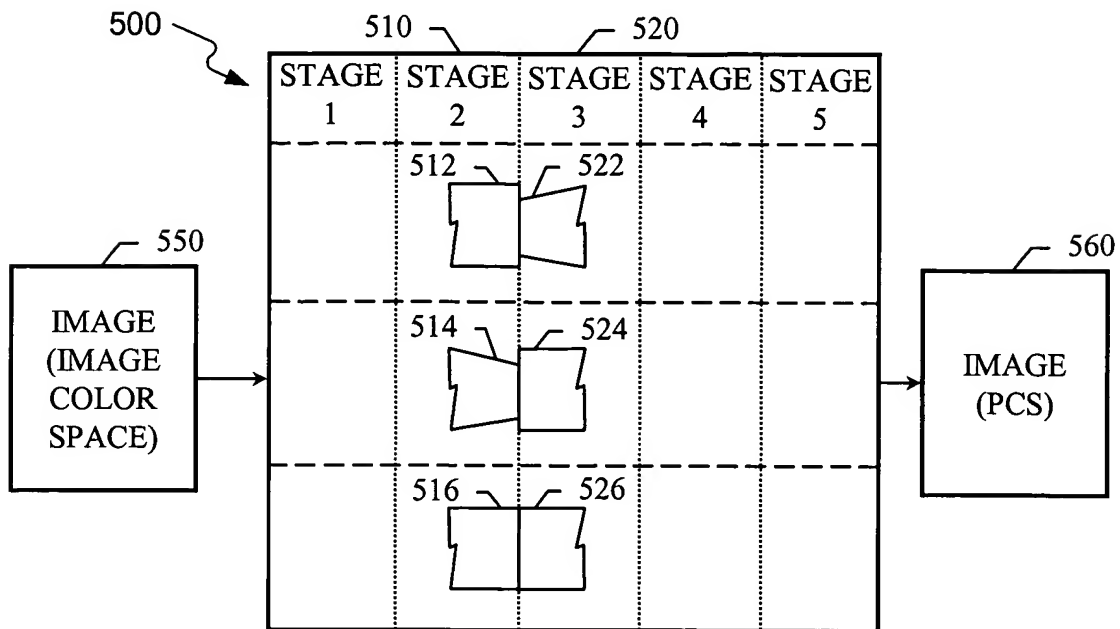
CONSTRUCTING COLOR PROFILE FOR PARAMETERIZED  
IMAGE COLOR SPACE

FIG. 5

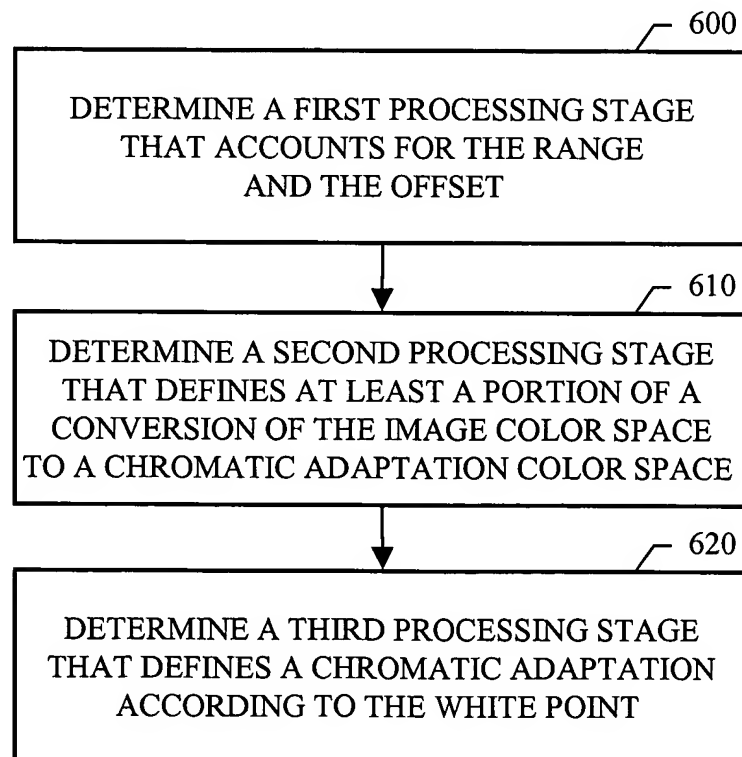
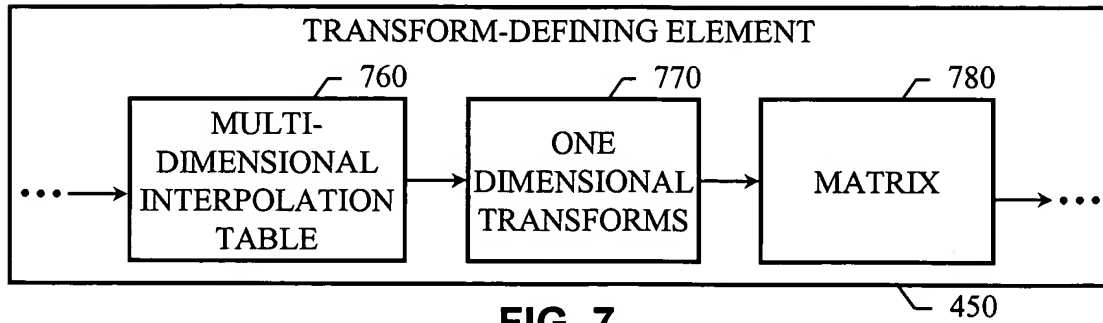
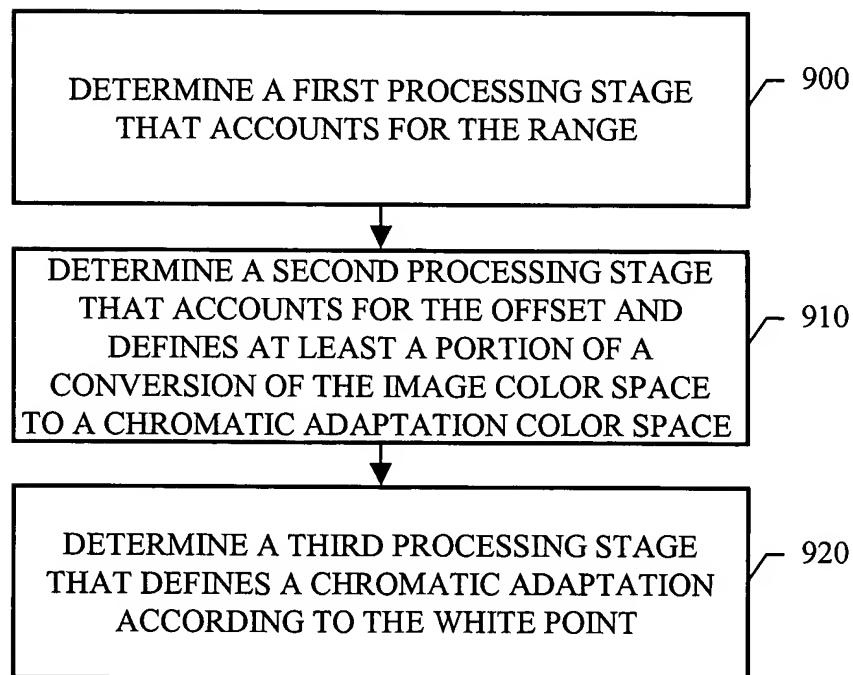


FIG. 6

**FIG. 7**

$$\begin{aligned}
 X &= X_w * f \left[ \frac{1}{116} \left( R_L L_i + \frac{116}{500} R_a a_i \right) - \frac{116 O_a}{500} \right] + \frac{(16 - O_L)}{116} \\
 Y &= Y_w * f \left[ \frac{1}{116} \left( R_L L_i + \frac{16 - O_L}{116} \right) \right] \\
 Z &= Z_w * f \left[ \frac{1}{116} \left( R_L L_i - \frac{116}{200} R_b b_i + \frac{116 O_b}{200} \right) + \frac{(16 - O_L)}{116} \right]
 \end{aligned}$$

FIG. 8 shows the mathematical formulas for X, Y, and Z color components. The formulas involve a function f applied to a combination of colorimetric data (R<sub>L</sub>L<sub>i</sub>, R<sub>a</sub>a<sub>i</sub>, R<sub>b</sub>b<sub>i</sub>), offsets (O<sub>a</sub>, O<sub>b</sub>), and white point data (X<sub>w</sub>, Y<sub>w</sub>, Z<sub>w</sub>). The constants 116, 500, 200, and 16 are used throughout the calculations.

**FIG. 8****FIG. 9**